

SUBSTITUTE FORM PTO-1449
(MODIFIED)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
04799/045001SERIAL NO.
09/077,835INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Use several sheets if necessary)

(37 CFR 1.98(b))

APPLICANT
Britton ChanceFILING DATE
June 4, 1998GROUP
3733

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER							ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	5	4	2	0	6	0	7	05/30/95	Miller et al.			
	AB												
	AC												
	AD												
	AE												
	AF												
	AG												
	AH												
	AI												
	AJ												
	AK												

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
AL		0 280 986 A1	07.09.88	Europe				
AM		DD 227 044 A1	11.09.85	Germany				
AN		DE 44 10 888 A1	05.10.95	Germany				
AO								
AP								

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

AO		
AR		
AS		

EXAMINER

DATE CONSIDERED

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SUBSTITUTE FORM PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 04799/045001		SERIAL NO. 09/077,835							
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) (37 CFR 1.98(b))				APPLICANT Britton Chance									
				FILING DATE June 4, 1998		GROUP							
U.S. PATENT DOCUMENTS													
EXAMINER INITIAL		PATENT NUMBER						ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
AA		3	0	6	8	7	4	2	12/18/62	Hicks, Jr. et al.	88	14	06/15/59
AB		3	2	2	9	6	8	5	01/18/66	Ringkamp et al.	128	2.05	08/30/65
AC		3	4	1	2	7	2	9	11/26/68	Smith, Jr.	128	2.05	08/30/65
AD		3	4	6	1	8	5	6	08/19/69	Polanyi	128	2	10/23/65
AE		3	6	3	8	6	4	0	02/01/72	Shaw	128	2R	11/01/67
AF		3	9	9	8	5	5	0	12/21/76	Konishi et al.	356	39	10/10/75
AG		4	0	8	6	9	1	5	05/02/78	Kofsky et al.	128	2L	05/25/76
AH		4	1	3	8	7	2	7	02/06/79	Mantz	364	525	10/31/77
AI		4	1	6	2	4	0	5	07/24/79	Chance et al.	250	461	05/23/78
AJ		4	1	6	7	3	3	1	09/11/79	Nielsen	356	39	12/20/76
AK		4	2	2	3	6	8	0	09/23/80	Jöbsis	128	633	03/05/79
AL		4	2	8	1	6	4	5	08/04/81	Jöbsis	128	633	06/26/77
AM		4	3	2	1	9	3	0	03/30/82	Jöbsis et al.	128	633	09/18/80
AN		4	3	8	0	2	4	0	04/19/83	Jöbsis et al.	128	633	08/03/81
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION													
		DOCUMENT NUMBER		PUBLICATION DATE		COUNTRY OR PATENT OFFICE		CLASS	SUBCLASS	TRANSLATION YES NO			
	AO	WO 92/20273		11/24/92		PCT							
	AP	WO 96/20638		07/11/96		PCT							
OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)													
	AN	Chance et al., "Photon Migration in Muscle and Brain," Photon Migration in Tissues, Plenum Press, pp. 121-135, 1989, Chance, B., ed.											
	AO	Cui et al., "Experimental Study of Migration Depth for the Photons Measured at Sample Surface," SPIE, 1431, 180-191, 1991.											
	AP												
	AO												
EXAMINER					DATE CONSIDERED 9/05								
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	APPLICANT Britton Chance		
	FILING DATE June 4, 1998	GROUP	

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	BA	3 7 0 9 6 1 2	01/09/73	Clemens	356	178	03/10/71
	BB	3 8 6 6 5 9 9	02/13/75	Johnson	128	2 L	01/21/72
	BC	3 9 9 4 5 8 5	11/30/76	Frey	356	40	08/11/75
	BD	4 1 1 9 4 0 6	10/10/78	Clemens	422	81	05/06/76
	BE	4 4 1 6 2 8 5	08/13/81	Shaw et al.	128	634	11/22/83
	BF	4 5 1 0 9 3 8	04/16/85	Jöbsis et al.	128	633	01/24/83
	BG	4 6 1 2 9 3 8	09/23/86	Dietrich et al.	128	665	09/06/83
	BH	4 8 0 0 8 8 5	1/31/89	Johnson	128	633	12/02/87
	BI	4 8 0 5 6 2 3	02/21/89	Jöbsis	128	633	09/04/87
	BJ	4 8 2 4 2 4 2	4/25/89	Frick et al.	356	41	09/26/86
	BK	4 8 4 6 1 8 3	4/11/89	Martin	128	633	12/02/87
	BL	4 9 0 8 7 6 2	3/13/90	Suzuki et al.	364	413.09	05/02/88
	BH	4 9 7 2 3 3 1	11/20/90	Chance	364	550	02/06/89
	BN	5 0 9 0 4 1 5	02/25/92	Yamashita et al.	128	665	01/11/91
	BO	5 1 0 6 3 8 7	4/21/92	Kittrell et al.	606	15	09/21/89
	BP	5 1 1 9 8 1 5	6/9/92	Chance	128	633	12/21/88
	BQ	5 1 8 7 6 7 2	2/16/93	Chance et al.	364	550	01/22/91
	BR	5 1 9 0 0 3 9	03/02/93	Takeuchi et al.	128	633	12/05/90
	BS	5 3 0 0 0 9 7	04/05/94	Lerner et al.	607	93	09/18/92
	BT	5 3 5 8 5 0 3	10/25/94	Bertwell et al.	606	27	01/25/94
	BU	5 5 5 1 4 2 2	09/30/96	Simonsen et al.	128	633	07/06/94

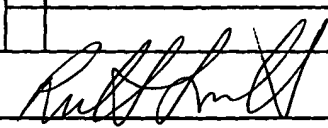
OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

BO	Greenfeld, "A Tissue Model For Investigating Photon Migration in Trans-Cranial Infrared Imaging," Photon Migration in Tissues, Plenum Press, B. Chance, ed., pp. 147-168, 1989.
BP	Sevick et al., "Analysis of absorption, scattering, and hemoglobin saturation using phase modulation spectroscopy," SPIE, 1431:264-275, 1991.
BQ	Sevick et al., "Photon migration in a model of the head measured using time- and frequency- domain techniques: potentials of spectroscopy and imaging," SPIE, 1431:84-96, 1991.
BR	Weng et al., "Measurement of Biological Tissue Metabolism Using Phase Modulation Spectroscopy Technology," SPIE, 1431:161-171, 1991.

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				FILING DATE June 4, 1998		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	CA	5 8 8 8 4 9 3	02/18/92	Giannini et al.			
	CB	5 4 0 8 0 9 3	04/18/95	Ito et al.			
	CC	5 5 9 6 9 8 7	01/28/97	Chance			
	CD	5 6 2 5 4 5 8	04/29/97	Alfano et al.			
	CE	5 6 5 5 5 3 0	08/12/97	Messerschmidt			
	CF	5 7 0 6 8 2 1	01/13/98	Matcher et al.			
	CG						
	CH						
	CI						
	CJ						
	CK						
	CL						
	CM						
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION							
		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION YES NO
	CN	WO 94/16615	04.08.94	PCT			
	CO	0 290 279	09.11.88	Europe			
	CP	0 233 108 A1	19.08.87	Europe			
	CQ	0 467 459 A2	22.01.92	Europe			
OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)							
	CR						
EXAMINER				DATE CONSIDERED			
				<u>9/05</u>			
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Substitute Disclosure Form (PTO-1449)

Sheet 1 of 3

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO.: N1-045002	SERIAL NO.: 10/658,735
	APPLICANT: Britton Chance	
	FILING DATE: September 9, 2003	GROUP:

U.S. PATENT DOCUMENTS

Exam Init.	Ref Des	Document No.	Date	Name	Class	Sub Class	FILING DATE If Appropriate
		2,688,971	09/14/54	Daniels et al.	607	79	09/13/50
		3,088,742	12/18/62	Hicks, Jr. et al.	88	14	06/16/69
		3,229,885	01/18/88	Ringkamp et al.	128	2.05	08/30/85
		3,412,729	11/26/68	Smith, Jr.	128	2.05	08/30/65
		3,461,856	08/19/69	Polanyi	128	2	10/23/65
		3,638,640	02/01/72	Shaw	128	2R	11/01/67
		3,709,612	01/09/73	Clemens	356	178	03/10/71
		3,866,599	02/13/75	Johnson	128	2L	01/21/72
		3,984,585	11/30/76	Frey	356	40	08/11/75
		3,998,550	12/21/76	Konishi et al.	356	39	10/10/75
		4,088,915	05/02/78	Kofsky et al.	128	2L	05/25/76
		4,119,406	10/10/78	Clemens	422	81	05/06/76
		4,138,727	02/08/79	Martinez	364	525	10/31/77
		4,182,405	07/24/79	Chance et al.	250	481	05/23/78
		4,167,331	09/11/79	Nielsen	356	39	12/20/76
		4,223,680	09/23/80	Jöbsis	128	633	03/05/79
		4,281,645	08/04/81	Jöbsis	128	633	08/26/77
		4,321,930	03/30/82	Jöbsis et al.	128	633	09/18/80
		4,380,240	04/19/83	Jöbsis et al.	128	633	08/03/81
		4,416,285	11/22/83	Shaw et al.	128	634	11/22/83
		4,510,938	04/16/85	Jöbsis et al.	128	633	01/24/83
		4,612,938	09/23/86	Dietrich et al.	128	665	09/06/83
		4,800,885	01/31/89	Johnson	128	633	12/02/87
		4,805,623	02/21/89	Jöbsis	128	633	09/04/87
		4,824,242	04/25/89	Frick et al.	356	41	08/26/86
		4,848,183	07/11/89	Martin	128	633	12/02/87
		4,908,762	03/13/90	Suzuki et al.	364	413.09	05/02/88
		4,972,331	11/20/80	Chance	364	550	02/08/89
		4,978,186	12/18/90	Mori	385	31	07/17/89
		5,088,493	02/18/92	Giannini et al.	600	323	02/16/88
		5,090,415	02/25/92	Yamashita et al.	128	665	01/11/91
		5,106,387	04/21/92	Kittrell et al.	606	15	09/21/89
		5,119,815	06/09/92	Chance	128	633	12/21/88
		5,187,672	02/16/93	Chance et al.	364	550	01/22/91

EXAMINER <i>R. J. Smith</i>	DATE CONSIDERED 9/05
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FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO.: N1-045002	SERIAL NO.: 10/658,735
	APPLICANT: Britton Chance	
	FILING DATE: September 9, 2003	GROUP:

U.S. PATENT DOCUMENTS

Exam Init	Ref Des	Document No.	Date	Name	Class	Sub Class	FILING DATE If Appropriate
		5,190,039	03/02/93	Takeuchi et al.	128	633	12/05/90
		5,300,097	04/05/94	Lerner et al.	607	93	09/18/92
		5,358,503	10/25/94	Bertwell et al.	606	27	01/25/94
		5,408,093	04/18/95	Ito et al.	250	227.26	03/11/94
		5,420,607	05/30/95	Miller et al.	345	158	04/06/94
		5,551,422	09/30/96	Simonsen et al.	128	633	07/08/94
		5,596,987	01/28/97	Chance	600	310	01/03/95
		5,625,458	04/29/97	Alfano et al.	356	446	02/03/95
		5,655,530	08/12/97	Messerschmidt	600	366	08/09/95
		5,706,821	01/13/98	Matcher et al.	600	310	12/30/94
		5,987,351	11/16/99	Chance	600	473	10/06/97
		6,496,718	12/17/02	Lonky	800	476	05/12/00
		6,618,614	09/09/03	Chance	600	473	09/08/98

FOREIGN PATENT DOCUMENTS

	Country & Doc. No. (11)	Pub. Date (43)		Class	Sub Class	Translation Yes No
	227 244 A1	09/1985	DE			
	44 10 888	10/1995	DE			
	0 233 108 A1	19/08/87	Europe			
	0 280 986 A1	07/08/88	Europe			
	0 290 279	09/11/88	Europe			
	0 467 459 A2	22/01/92	Europe			
	WO 92/20273	11/26/92	PCT			
	WO 94/18615	04/08/94	PCT			
	WO 96/20638	07/11/96	PCT			

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	LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	
	APPLICANT: Britton Chance	
	FILING DATE: September 9, 2003	GROUP:

U.S. PATENT DOCUMENTS

Exam Init	Ref Des	Document No.	Date	Name	Class	Sub Class	FILING DATE If Appropriate
<i>24</i>		2,688,971	09/14/54	Daniels et al.	607	79	09/13/50
		3,068,742	12/18/62	Hicks, Jr. et al.	88	14	06/15/59
		3,229,685	01/18/66	Ringkamp et al.	128	2,05	08/30/65
		3,412,729	11/26/68	Smith, Jr.	128	2,05	08/30/65
		3,461,856	08/19/69	Polanyi	128	2	10/23/65
		3,638,640	02/01/72	Shaw	128	2R	11/01/67
		3,708,612	01/09/73	Clemens	356	178	03/10/71
		3,866,599	02/13/75	Johnson	128	2L	01/21/72
		3,994,585	11/30/76	Frey	356	40	08/11/75
		3,988,550	12/21/76	Konishi et al.	356	39	10/10/75
		4,086,915	05/02/78	Kofsky et al.	128	2L	05/25/76
		4,119,406	10/10/78	Clemens	422	81	05/06/76
		4,138,727	02/06/79	Mantz	364	525	10/31/77
		4,162,405	07/24/79	Chance et al.	250	461	05/23/78
		4,167,331	09/11/79	Nielsen	356	39	12/20/76
		4,223,680	09/23/80	Jöbsis	128	633	03/05/79
		4,281,645	08/04/81	Jöbsis	128	633	06/26/77
		4,321,930	03/30/82	Jöbsis et al.	128	633	09/18/80
		4,380,240	04/19/83	Jöbsis et al.	128	633	08/03/81
		4,416,285	11/22/83	Shaw et al.	128	634	11/22/83
		4,510,938	04/16/85	Jöbsis et al.	128	633	01/24/83
		4,612,938	09/23/86	Dietrich et al.	128	665	09/06/83
		4,800,885	01/31/89	Johnson	128	633	12/02/87
		4,805,623	02/21/89	Jöbsis	128	633	09/04/87
		4,824,242	04/25/89	Frick et al.	356	41	09/28/86
		4,846,183	07/11/89	Martin	128	633	12/02/87
		4,908,762	03/13/90	Suzuki et al.	364	413.09	05/02/88
		4,972,331	11/20/90	Chance	364	550	02/06/89
		4,978,186	12/18/90	Mori	366	31	07/17/89
		5,088,493	02/18/92	Giannini et al.	600	323	02/16/88
		5,090,415	02/25/92	Yamashita et al.	128	665	01/11/91
		5,108,387	04/21/92	Kittrell et al.	608	15	09/21/89
<i>24</i>		5,119,816	06/09/92	Chance	128	633	12/21/88
		5,187,672	02/16/93	Chance et al.	364	550	01/22/91

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U.S. PATENT DOCUMENTS

Exam Init	Ref Des	Document No.	Date	Name	Class	Sub Class	FILING DATE If Appropriate
<i>LU</i>		6,190,039	03/02/93	Takeuchi et al.	128	633	12/05/80
		5,300,097	04/05/94	Lerner et al.	607	93	09/18/82
		5,358,503	10/25/94	Bertwell et al.	606	27	01/25/94
		5,408,093	04/18/95	Ito et al.	250	227.26	03/11/94
		5,420,607	05/30/95	Miller et al.	345	156	04/06/94
		5,551,422	09/30/96	Simonsen et al.	128	633	07/06/94
		5,596,987	01/28/97	Chance	600	310	01/03/95
		5,625,458	04/29/97	Alfano et al.	358	446	02/03/95
		5,655,530	08/12/97	Messerschmidt	600	366	08/09/95
		5,706,821	01/13/98	Matcher et al.	600	310	12/30/94
		5,987,351	11/16/99	Chance	600	473	10/06/97
		6,496,718	12/17/02	Lonky	600	476	05/12/00
<i>LU</i>		6,618,614	09/09/03	Chance	600	473	09/08/98

FOREIGN PATENT DOCUMENTS

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<i>LU</i>	227 044 A1	09/1985	DE			
	44 10 888	10/1995	DE			
	0 233 108 A1	19/08/87	Europe			
	0 280 988 A1	07/09/88	Europe			
	0 290 279	09/11/88	Europe			
	0 487 459 A2	22/01/92	Europe			
	WO 92/20273	11/26/92	PCT			
	WO 94/16615	04/08/94	PCT			
<i>LU</i>	WO 96/20638	07/11/96	PCT			

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	APPLICANT: Britton Chance	
	FILING DATE: September 9, 2003	GROUP:

OTHER ART

(Including Author, Title, Date, Pertinent Pages, Publication, Etc.)

[illegible]

EXAMINER <i>Ruth Smith</i>	DATE CONSIDERED <i>9/05</i>
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